

Amendments to the Claims:

Claims 1-17 and 29-36 are pending. Claims 34-36 are allowed. Claims 1-13, 17 and 29-33 have been amended herein. Please enter these claims as presented. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of communications, comprising:
dividing a plurality of subscriber stations into a plurality of groups;
assigning a ~~different~~ lesser number of a plurality of orthogonal codes for supplemental traffic channels ~~to each of the groups, the number of the orthogonal codes assigned to one of the groups being less than a number of traffic channels to be assigned to the number of subscriber stations in said the one of the groups;~~
encoding communications to one of the subscriber stations in ~~said the~~ the one of the groups at a data rate at least a portion greater than a first data rate supported by a dedicated traffic channel of the one of the subscriber stations; and
determining whether to spread at least the portion of communications to ~~said the~~ the to one of the subscriber stations with one of the orthogonal codes supporting a second data rate adequate to handle the portion.
2. (Currently Amended) The method of claim 1 further comprising allocating to ~~said the~~ the one of the subscriber stations one or more of the orthogonal codes assigned to ~~said the~~ the one of the groups, ~~said the~~ the one of the orthogonal codes being selected from the one or more of the orthogonal codes allocated to ~~said the~~ the one of the subscriber stations.
3. (Currently Amended) The method of claim 1 further comprising allocating to each of the subscriber stations in ~~said the~~ the one of the groups one or more of the orthogonal codes assigned to ~~said the~~ the one of the groups, and using each of the orthogonal codes in ~~said the~~ the one of the groups to spread at least a portion of communications to different subscriber stations in ~~said~~

the one of the groups, the orthogonal code being used to spread ~~said the~~ the at least a portion of the communications to each of the different subscriber stations being selected from the respective one or more of the codes allocated thereto.

4. (Currently Amended) The method of claim 1 further comprising spreading a second portion of the communications to ~~said the~~ the one of the subscriber stations with a second orthogonal code different from each of the orthogonal codes assigned to the groups.

5. (Currently Amended) The method of claim 1 wherein the data rate of the communications comprises a full rate and less than a full rate, and wherein ~~said the~~ the at least a portion of the communications to ~~said the~~ the one of the subscriber stations is spread with ~~said the~~ the one of the orthogonal codes when the data rate of the communications is the full rate, and wherein ~~said the~~ the at least a portion of the communications to ~~said the~~ the one of the subscriber stations is not spread with ~~said the~~ the one of the orthogonal codes when the data rate of the communications is less than the full rate.

6. (Currently Amended) A communications station, comprising:
a processor configured to divide a plurality of subscriber stations into a plurality of groups, and assign a ~~different~~ lesser number of a plurality of orthogonal codes for supplemental traffic channels ~~to each of the groups, the number of the orthogonal codes assigned to one of the groups being less than a number of traffic channels to be assigned to the number of~~ subscriber stations in ~~said the~~ the one of the groups; and

an encoder configured to encode communications to one of the subscriber stations in ~~said the~~ the one of the groups at a data rate at least a portion greater than a first data rate supported by a dedicated traffic channel of the one of the subscriber stations;

wherein the processor is further configured to determine whether to spread at least the portion of communications to ~~said the~~ the to one of the subscriber stations with one of the orthogonal codes supporting a second data rate adequate to handle the portion.

7. (Currently Amended) The communications station of claim 6 wherein the orthogonal codes assigned to ~~said~~ the one of the groups each have the same length.

8. (Currently Amended) The communications station of claim 6 wherein the processor is further configured to allocate to ~~said~~ the one of the subscriber stations one or more of the orthogonal codes assigned to ~~said~~ the one of the groups, ~~said~~ the one of the orthogonal codes being selected from the one or more of the orthogonal codes allocated to ~~said~~ the one of the subscriber stations.

9. (Currently Amended) The communications station of claim 6 wherein the encoder is further configured to encode communications to the subscriber stations in ~~said~~ the one of the groups, and wherein the processor is further configured to allocate one or more of the orthogonal codes assigned to ~~said~~ the one of the groups to each of the subscriber stations in ~~said~~ the one of the groups, and use each of the orthogonal codes in ~~said~~ the one of the groups to spread at least a portion of the communications of different ones of the subscriber stations in ~~said~~ the one of the groups, the orthogonal code being used to spread ~~said~~ the at least a portion of the communications to each of the different ones of the subscriber stations being selected from the respective one or more of the codes allocated thereto.

10. (Currently Amended) The communications station of claim 9 wherein a different combination of the orthogonal codes are allocated to each of the subscriber stations in ~~said~~ the one of the groups.

11. (Currently Amended) The communications station of claim 9 wherein a same combination of the orthogonal codes are allocated to a plurality of the subscriber stations in ~~said~~ the one of the groups.

12. (Currently Amended) The communications station of claim 6 further comprising a modulator configured to spread a second portion of the communications to ~~said~~ the one of the

subscriber stations with a second orthogonal code different from each of the orthogonal codes assigned to the groups.

13. (Currently Amended) The communications station of claim 6 wherein the data rate of the communications comprises a full rate and less than a full rate, the communications station further comprising a modulator configured to spread ~~said the~~ at least a portion of the communications to ~~said the~~ one of the subscriber stations when the data rate of the communications is the full rate, and not spread ~~said the~~ at least a portion of the communications to ~~said the~~ one of the subscriber stations when the data rate of the communications is less than the full rate.

14. (Original) The communications station of claim 13 wherein the less than full rate comprises a data rate equal to $\frac{1}{2}$ the full rate.

15. (Original) The communications station of claim 14 wherein the less than full rate comprises a data rate equal to $\frac{1}{4}$ the full rate and a data rate equal to $\frac{1}{8}$ the full rate.

16. (Original) The communications station of claim 15 wherein the encoder comprises a vocoder.

17. (Currently Amended) A communications station, comprising:
means for dividing a plurality of subscriber stations into a plurality of groups;
means for assigning a ~~different~~ lesser number of a plurality of orthogonal codes for supplemental traffic channels ~~to each of the groups, the number of the orthogonal codes assigned to one of the groups being less than a number of traffic channels to be assigned to the number of~~ subscriber stations in ~~said the~~ one of the groups;

means for encoding communications to one of the subscriber stations in ~~said the~~ one of the groups at a data rate at least a portion greater than a first data rate supported by a dedicated traffic channel of the one of the subscriber stations; and

means for determining whether to spread at least the portion of communications to ~~said~~ the to one of the subscriber stations with one of the orthogonal codes supporting a second data rate adequate to handle the portion.

18-28. (Canceled)

29. (Currently Amended) A computer-readable medium including computer-executable instructions encoded thereon for performing the steps of:

dividing a plurality of subscriber stations into a plurality of groups;

assigning a ~~different~~ lesser number of a plurality of orthogonal codes for supplemental traffic channels to ~~each of the groups, the number of the orthogonal codes assigned to one of the groups being less than a number of traffic channels to be assigned to the number of~~ subscriber stations in ~~said~~ the one of the groups;

encoding communications to one of the subscriber stations in ~~said~~ the one of the groups at a data rate at least a portion greater than a first data rate supported by a dedicated traffic channel of the one of the subscriber stations; and

determining whether to spread at least the portion of communications to ~~said~~ the to one of the subscriber stations with one of the orthogonal codes supporting a second data rate adequate to handle the portion.

30. (Currently Amended) The computer-readable medium of claim 29 further comprising computer-executable instructions encoded thereon for performing the step of allocating to ~~said~~ the one of the subscriber stations one or more of the orthogonal codes assigned to ~~said~~ the one of the groups, ~~said~~ the one of the orthogonal codes being selected from the one or more of the orthogonal codes allocated to ~~said~~ the one of the subscriber stations.

31. (Currently Amended) The computer-readable medium of claim 29 further comprising computer-executable instructions encoded thereon for performing the step of allocating to each of the subscriber stations in ~~said~~ the one of the groups one or more of the orthogonal codes assigned to ~~said~~ the one of the groups, and using each of the orthogonal codes

in ~~said~~ the one of the groups to spread at least a portion of communications to different subscriber stations in ~~said~~ the one of the groups, the orthogonal code being used to spread ~~said~~ the at least a portion of the communications to each of the different subscriber stations being selected from the respective one or more of the codes allocated thereto.

32. (Currently Amended) The computer-readable medium of claim 29 further comprising computer-executable instructions encoded thereon for performing the step of spreading a second portion of the communications to ~~said~~ the one of the subscriber stations with a second orthogonal code different from each of the orthogonal codes assigned to the groups.

33. (Currently Amended) The computer-readable medium of claim 32 wherein the data rate of the communications comprises a full rate and less than a full rate, and wherein ~~said~~ the at least a portion of the communications to ~~said~~ the one of the subscriber stations is spread with ~~said~~ the one of the orthogonal codes when the data rate of the communications is the full rate, and wherein ~~said~~ the at least a portion of the communications to ~~said~~ the one of the subscriber stations is not spread with ~~said~~ the one of the orthogonal codes when the data rate of the communications is less than the full rate.

34. (Previously Presented) A method of communications, comprising:

receiving a dedicated orthogonal code for a dedicated traffic channel wherein a length of the dedicated orthogonal code supports a first data rate less than a full data rate of a subscriber station; and

receiving an assignment of a plurality of orthogonal codes for supplemental traffic channels wherein a length of at least one of the plurality of orthogonal codes supports a second data rate adequate to handle an overflow up to the full data rate of the subscriber station.

35. (Previously Presented) The method of claim 34 wherein the first data rate is a half data rate and the second data rate is one of an eighth data rate, quarter data rate, and half data rate.

36. (Previously Presented) The method of claim 34 wherein one of the plurality of orthogonal codes for supplemental channels can be substituted for another one of the plurality of orthogonal codes on a frame-by-frame basis.